



LINK ELECTRONICS, INC.

COMPONENT ANALOG to NTSC ENCODING MODEL IEC-843



MADE IN THE USA



MODEL VERSIONS

IEC-843, RGB to NTSC or YC
IEC-843A, RGB to NTSC & YC
IEC-843B, RGB to NTSC & YC
Plus YC in & NTSC Out
IEC-843C, YUV to NTSC or YC

FEATURES

- ◆ PC Lock
- ◆ Gen-lock
- ◆ RGB to NTSC
- ◆ YUV to NTSC, Option
- ◆ "Y" and "C" Outputs
- ◆ 360° Subcarrier Phase
- ◆ Internal RS-170A Sync Gen.

The IEC-843 is a RGB to NTSC encoder with RS-170A sync generator. The unit also accepts YUV (BETA or MII) inputs as model IEC-843C. Other versions are available. The system is a self contained unit measuring only 1 3/4 inches high and 8 inches deep. It can be mounted in a standard 19 inch equipment rack.

The required signal input is RGB, or YUV with or without sync on the green channel. An external composite video or black burst input is required to gen-lock to an external source. The internal sync generator provides blanking and burst to the encoder section.

The IEC-843 provides all sync generator pulse outputs that conform to the RS-170A specification. The propagation delay of the encoded signal is 250nS. An internal set of jumpers provide "Y" and "C" outputs for recording on S/VHS tape recorders. The IEC-843A provides NTSC and YC outputs simultaneously. The various configurations of the unit are explained above.

Front panel controls are: AC ON/OFF, normal lock, internal lock, PC lock, internal frequency, SC phase and horizontal phase. The unit operates on 115 VAC and dissipates approximately 15 watts.

MODEL IEC-843, COMPONENT ANALOG TO NTSC ENCODER

ENCODER INPUTS:

Inputs: RGB
 Optional Inputs: YUV
 Levels: 0.7 Vp-p non-composite
 Impedance: 47K Ω \pm 5% looping
 Connectors: BNC

ENCODER OUTPUTS:

Number: Two NTSC, 1.0V p-p, or one YC pair
 Impedance: 75 Ω , \pm 1%
 Connectors: BNC

PERFORMANCE:

Vertical Tilt: <1%
 Propagation Delay: 250nS
 Y to C Timing: \pm 40nS
 Frequency Response: -3dB @ 7.5MHz

GENERATOR OUTPUTS & PERFORMANCE:

Outputs:
 SYNC: One (1)
 BLANKING: One (1)
 H. DRIVE: One (1)
 V.DRIVE: One (1)
 BURST FLAG: One(1)
 Levels: 4.0 Vp-p \pm 5% fixed
 Impedance: 75 Ω \pm 1%, source terminated
 Widths: Norm FCC, EIA & NTSC
 Tilt & Overshoot: <1%
 Jitter : <5nS, reference to SC
 Rise Time: 140nS \pm 20nS

SUBCARRIER:

Outputs: One (1)
 Frequency: 3.579545 MHz \pm 1 Hz
 Output Impedance: 75 Ω \pm 1%
 Output Level: 2.0 Vp-p adj. \pm 20%
 Harmonic Distortion: >-35dB @ 2Vp-p

GEN-LOCK MODE

Video Level: 1.0Vp-p \pm 6dB
 Video Input Impedance: >20K loop
 Pulse Jitter: <5nS, ref to input sync
 Subcarrier Jitter: <0.5°
 Color Lock Range: \pm 4 Hz

FRONT PANEL CONTROLS:

Subcarrier Phase: 360°
 Horizontal Phase: \pm 4.5 μ S
 Crystal Frequency: \pm 3Hz at 3.57945MHz
 Switch: Selects Gen-lock, Internal lock or PC-lock

ENVIRONMENTAL:

Temperature: 0° to 50°C, Amb

POWER:

Input: 115/230 VAC
 Power: 15 Watts

MECHANICAL:

Height: 1 3/4 Inches
 Depth: 8 Inches
 Width: 19 Inches
 Weight: 4.75 Pounds

